



US009328624B2

(12) **United States Patent**
Finley et al.

(10) **Patent No.:** **US 9,328,624 B2**
(45) **Date of Patent:** **May 3, 2016**

(54) **HYDROCRATIC GENERATOR WITH
MEMBRANE WALL**

USPC 290/54
See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

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4,947,647	A *	8/1990	Jensen	F03B 17/00 60/398
5,106,230	A *	4/1992	Finley	A01K 61/02 119/200
9,157,332	B2 *	10/2015	Hanna	.....	F01D 15/10
2003/0173784	A1 *	9/2003	Jones	.....	B01F 3/0865 290/54
2006/0012178	A1 *	1/2006	Finley	.....	F03B 13/00 290/1 R
2006/0226656	A1 *	10/2006	Finley	.....	F03B 13/00 290/1 R
2007/0257493	A1 *	11/2007	Alstot	.....	F03B 13/00 290/54

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/558,530**

(22) Filed: **Dec. 2, 2014**

(65) **Prior Publication Data**

US 2015/0322810 A1 Nov. 12, 2015

* cited by examiner

Related U.S. Application Data

Primary Examiner — Joseph Waks

(63) Continuation-in-part of application No. 14/444,707,
filed on Jul. 28, 2014, now abandoned.

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(60) Provisional application No. 61/858,827, filed on Jul.
26, 2013.

(57) **ABSTRACT**

(51) **Int. Cl.**
F03D 9/00 (2006.01)
F01D 15/10 (2006.01)
H02K 7/18 (2006.01)

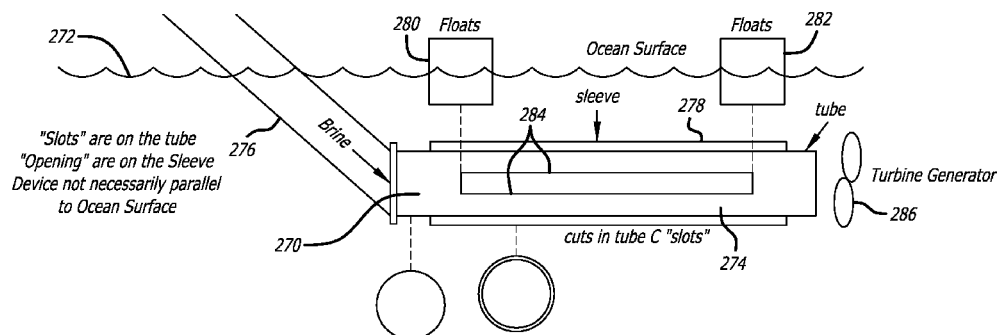
A hydrocratic generator comprises a generally horizontal
solid pipe and an inner tube, and an annular space formed
between the solid pipe and the inner tube. The solid pipe
receives a first aqueous solution and the inner tube receives a
second aqueous solution. The inner tube is comprised of a
membrane wall which facilitates the mixing between the first
and the second aqueous solution.

(52) **U.S. Cl.**
CPC **F01D 15/10** (2013.01); **H02K 7/1823**
(2013.01)

(58) **Field of Classification Search**

CPC F03B 13/00

20 Claims, 17 Drawing Sheets



*Sleeve is contiguous to tube; sleeve can rotate in
either direction increasing or decreasing the area of the
slots on the tube that are exposed to Ocean waters
through the openings on the sleeve*

alternate opening on sleeve

